

Product datasheet for TG320343

OriGene Technologies, Inc.

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ErbB 3 (ERBB3) Human shRNA Plasmid Kit (Locus ID 2065)

Product data:

Product Type: shRNA Plasmids

Product Name: ErbB 3 (ERBB3) Human shRNA Plasmid Kit (Locus ID 2065)

Locus ID: 2065

Synonyms: c-erbB-3; c-erbB3; ErbB-3; erbB3-5; FERLK; HER3; LCCS2; MDA-BF-1; p45-sErbB3; p85-sErbB3;

p180-ErbB3

Vector: pGFP-V-RS (TR30007)

E. coli Selection: Kanamycin

Mammalian Cell Puromycin

Selection: Format:

Retroviral plasmids

Components: ERBB3 - Human, 4 unique 29mer shRNA constructs in retroviral GFP vector(Gene ID = 2065).

5µg purified plasmid DNA per construct

29-mer scrambled shRNA cassette in pGFP-V-RS Vector, TR30013, included for free.

RefSeq: NM 001005915, NM 001982, NM 001982.1, NM 001982.2, NM 001982.3, NM 001005915.1,

BC082992, BC082992.1, BC002706, BC041579, BM837872, NM 001982.4

UniProt ID: P21860

Summary: This gene encodes a member of the epidermal growth factor receptor (EGFR) family of

receptor tyrosine kinases. This membrane-bound protein has a neuregulin binding domain but not an active kinase domain. It therefore can bind this ligand but not convey the signal into the cell through protein phosphorylation. However, it does form heterodimers with other EGF receptor family members which do have kinase activity. Heterodimerization leads to the activation of pathways which lead to cell proliferation or differentiation. Amplification of this gene and/or overexpression of its protein have been reported in numerous cancers, including prostate, bladder, and breast tumors. Alternate transcriptional splice variants encoding different isoforms have been characterized. One isoform lacks the intermembrane region and

is secreted outside the cell. This form acts to modulate the activity of the membrane-bound form. Additional splice variants have also been reported, but they have not been thoroughly

characterized. [provided by RefSeq, Jul 2008]







shRNA Design:

These shRNA constructs were designed against multiple splice variants at this gene locus. To be certain that your variant of interest is targeted, please contact techsupport@origene.com. If you need a special design or shRNA sequence, please utilize our custom shRNA service.

Performance Guaranteed: OriGene guarantees that the sequences in the shRNA expression cassettes are verified to correspond to the target gene with 100% identity. One of the four constructs at minimum are guaranteed to produce 70% or more gene expression knock-down provided a minimum transfection efficiency of 80% is achieved. Western Blot data is recommended over qPCR to evaluate the silencing effect of the shRNA constructs 72 hrs post transfection. To properly assess knockdown, the gene expression level from the included scramble control vector must be used in comparison with the target-specific shRNA transfected samples.

For non-conforming shRNA, requests for replacement product must be made within ninety (90) days from the date of delivery of the shRNA kit. To arrange for a free replacement with newly designed constructs, please contact Technical Services at techsupport@origene.com. Please provide your data indicating the transfection efficiency and measurement of gene expression knockdown compared to the scrambled shRNA control (Western Blot data preferred).